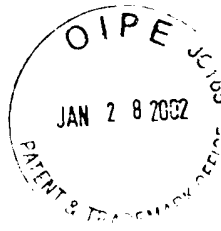


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REMARKS

This Preliminary Amendment is submitted in advance of the first examination of the subject application. The amendments to the specification have been made solely to clarify the invention. No new matter has been entered.

No fee is deemed necessary in connection with the filing of this response. However, if any fee is deemed necessary, the Commissioner is authorized to charge (or apply any credits to) Deposit Account No.: 50-1355. The Examiner is invited to contact Applicant's undersigned representative if there are any questions related to this matter.

Respectfully submitted,

Dated: December 17, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Paragraph [0047] has been amended as follows:

The invention also provides phytase encoding polynucleotides having a nucleotide sequence substantially identical to SEQ ID NO:7, and having a modified nucleotide sequence selected from nucleotide 390 is G; 391 is A; nucleotide 438 is T; 439 is G; 440 is G; 471 is C; 473 is T; 477 is T; 448 is G; 449 is T; 690 is G; 691 is A; 692 is G; 729 is T; 730 is A; 731 is T; 864 is T; 865 is G; 1017 is G, or any combination thereof. Further, the invention provides a polynucleotide having a nucleotide sequence substantially identical to SEQ ID NO:7, and having a modified nucleotide sequence selected from nucleotide 390 is G and 391 is A (SEQ ID NO: 5); nucleotide 438 is T, 439 is G and 440 is G (SEQ ID NO: 6); 471 is C and 473 is T; 477 is T, 448 is G, and 449 is T; 690 is G, 691 is A and 692 is G; 729 is T, 730 is A, and 731 is T; 864 is T and 865 is G; 1017 is G, or any combination thereof. The later sequence is exemplified in SEQ ID NO:9 and the corresponding amino acid sequence is SEQ ID NO:10.

Paragraph [0241] has been amended as follows:

Examples of a variant phytase polynucleotide sequence include sequences substantially as set forth in SEQ ID NO:7, wherein the polynucleotide has a nucleotide sequence as set forth in a) SEQ ID NO:9; b) SEQ ID NO:9 wherein all Ts are Us (RNA); wherein the expression of the phytase-encoding nucleic acid leads to the production of said substantially pure phytase enzyme; and c) SEQ ID NO:7, wherein 390 is G; 391 is A; nucleotide 438 is T; 439 is G; 440 is

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G; 471 is C; 473 is T; 477 is T; 448 is G; 449 is T; 690 is G; 691 is A; 692 is G; 729 is T; 730 is A; 731 is T; 864 is T; 865 is G; 1017 is G, or any combination thereof. More specifically, with respect to part c), the invention provides a nucleotide sequence substantially identical to SEQ ID NO:7, and having a modified nucleotide sequence selected from nucleotide 390 is G and 391 is A (SEQ ID NO:5); nucleotide 438 is T, 439 is G and 440 is G (SEQ ID NO:6); 471 is C and 473 is T; 477 is T, 448 is G, and 449 is T; 690 is G, 691 is A and 692 is G; 729 is T, 730 is A, and 731 is T; 864 is T and 865 is G; 1017 is G, or any combination thereof.